

Soil Conservation

"Out of a long list of nature's gifts to man, none is perhaps so utterly essential to human life as soil."

-Hugh Hammond Bennett, First Chief, Soil Conservation Service, 1939

he Natural Resources Conservation Service (NRCS) was founded on the principle that soil is a precious resource that must be preserved for the viability of man. After 70 years, NRCS continues to improve the quality of soil and reduce soil erosion.

Through cooperative conservation partnerships, NRCS works to prevent the loss and degradation of soil from overuse, erosion, salinization and other factors. Soil conservationists collect and analyze information about the status, condition and trend of soil in order to combat these problems. The information is used by NRCS to aid landowners with sensible decision making in the wise use and management of natural resources.

Soil surveys have evolved into a partnership of state and federal agencies working with NRCS to collect, classify, interpret and provide soils information. In August 2005, NRCS launched the USDA Web Soil Survey site to provide public access to the national soils information system.

This site is a simple yet powerful way to access and analyze soils data and may be accessed at http://soils. usda.gov/survey.People without computer access may acquire soil survey information from any NRCS local office or by going to a public library.

Soil surveys are the foundation for land conservation activities as well as private and commercial land development. NRCS uses soil surveys and scientific





and technical knowledge to help landowners install conservation practices on their property. Some soil saving practices include buffers, windbreaks, reduced tillage, intensive rotational grazing, contour stripcropping, irrigation water management and terracing.

NRCS creates and uses maps such as the Drought Vulnerable Soil Landscapes maps to assist farmers with crop and farm management decisions. These maps help farmers determine if their area is prone to drought, which in turn leads them to choose drought resistant crops and enact other soil saving and moisture conserving practices on their land. (See map).

Voluntary programs that provide technical and/or financial assistance to improve the soil include:

- Conservation Security Program (CSP) This program rewards landowners who have implemented effective conservation practices on their land.
- Conservation Technical Assistance (CTA)

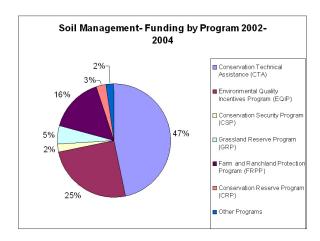
 This program provides direct cooperative conservation planning, design, and implementation assistance, that helps people conserve, maintain and improve their natural resources.
- Environmental Quality Incentives Program
 (EQIP) This program helps eligible participants
 install or implement structural and management
 practices on their land.

- Wildlife Habitat Incentives Program (WHIP) –
 This program is for people who want to develop
 and improve fish and wildlife habitat primarily
 on private land.
- Conservation Innovation Grants (CIG) These grants stimulate the development and adoption of innovative conservation approaches and technologies for environmental enhancement and protection in conjunction with agricultural production.
- Agricultural Management Assistance (AMA)

 This program provides cost-share assistance to agricultural producers to voluntarily address issues such as water management, water quality and erosion control by incorporating conservation into their farming operations.

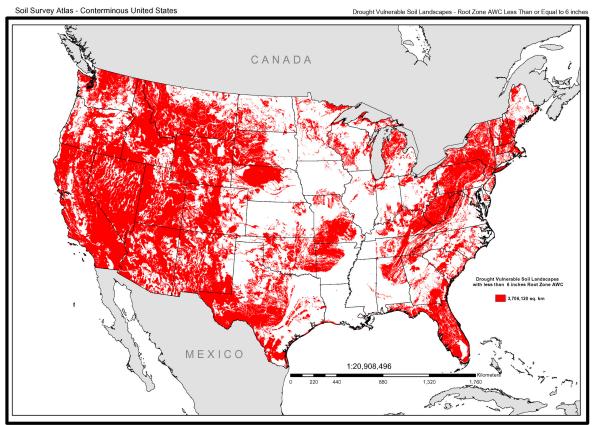
Through these programs, NRCS helps private landowners install soil saving practices on their property. From 2002 through 2004, NRCS has provided over \$1.3 billion for direct financial and technical assistance to landowners to establish soil management practices on their land. (See graph).

NRCS has been successful at enhancing the quality and sustainability of soil across the nation. Under CSP, payments have rewarded producers for management activities that improve soil quality. For example, in one state, clients will receive an annual payment of \$5.80



per acre because they used reduced tillage practices that improved soil quality and resulted in an excellent Soil Conditioning Index (SCI). The SCI predicts the effect of cropping systems on soil organic matter levels which, is the primary indicator of soil quality and carbon sequestration.

Whether you're a landowner, representative of a tribe or part of a conservation group, NRCS will work with you to develop conservation plans. Anyone interested in more information about NRCS programs and soil conservation should contact their local USDA Service Center or NRCS office. Information also is also on the Web at: http://www.nrcs.usda.gov and at http://soils.usda.gov.



Analysis and map prepared by USDA-NRCS National Soil Survey Center Staff NSSC-4007-04172003-2

Sources: Soil Survey Staff. 1994. State Soil Geographic Database Root Zone Available Water Capacity Less Than or Equal to 6 inches

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